

## **REMARKS**

The Office Action mailed August 15, 2005 has been reviewed and carefully considered.

Claims 22 and 27 have been canceled.

Claims 21, 23-24, 26 and 28-33 are pending.

Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested.

The Examiner has rejected claims 31-33 under 35 U.S.C. §112, paragraph 1, citing a lack the support in the specification for the integration of a POTS digitizer into a DSLAM. Regarding the Examiner's rejection of claims 31-33, the Applicant respectfully draws the Examiner's attention to Page 10, Lines 3-7 of the current specification. These lines state that the POTS digitizer may be integrated into the DSLAM:

“This invention provides a piece of equipment to the DSL network. This can be integrated into the traditional DSLAM or can be an entirely different piece of equipment. The piece of equipment functions as a POTS terminator and digitizer.”

The Applicant respectfully requests the withdrawal of the Examiner's 35 U.S.C. §112 rejection in light of this clarification.

Claims 21, 23-24, 26 and 28-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kaplan et al., (U.S. Patent No. 6,141,339, hereinafter Kaplan) in view of Gerszberg et al., (U.S. Patent No. 6,359,881,

hereinafter Gerszberg) further in view of Gupta et al. (U.S. Patent No. 6,731,627, hereinafter Gupta).

As noted by the Examiner, Kaplan does not disclose: a fault tolerance, or power failure mode for handling the POTS when the customer site loses power; and a second mode of operation. Additionally, the Examiner has cited Gerszberg as teaching providing a lifeline for continuous telephony service in the event of a power failure at the CPE, and converting analog to digital so that customers can still have service over an ATM-type connection during such a power failure. The Examiner has also cited Gupta as teaching a signal digitizer external to the CPE, coupled between CPE and an ATM switch.

However, the Applicant respectfully draws the Examiner's attention to the fact that none of the cited prior art discloses a signal digitizer including a statistical multiplexer (2203) included in the POTS digitizer as shown in Fig. 22. As disclosed on pages 9-10 and 49-50 of the specification, the statistical multiplexer allows concentration of multiple voice signals into a single higher bandwidth signal before the voice signals reach the ATM switch. This allows a DSL provider to reduce the number of ATM to POTS connections dedicated to maintaining a lifeline for every customer by avoiding a one-to-one mapping per ATM to POTS connection for each of the lifelines provided.

The Examiner has also cited Gupta as teaching a digitizer coupled between the CPE and the ATM network. However, the Applicant respectfully draws the Examiners attention to column 5, lines 6-8, which states:

“The home LAN (15) includes telephone modules (TMs) (16) and data modules (18) connected to a home LAN over existing in-home telephone wiring (14)”.

The Applicant also draws the Examiner’s attention to column 5, lines 8-16 of the Gupta specification, which further states:

“For a telephone call, the TM (16) converts the analog voice signals from a connected telephone (24) to digital signals in the form of pulse code modulation (PCM) samples. The TMs (16) transmit and receive PCM samples to and from the HLH [Home LAN Hub] (20) using a physical layer/media access control layer protocol described further herein. The HLH (20) converts the PCM samples along with channel associated signaling (CAS) into an ATM cell format optimized for transport for voice”.

In light of these two passages, the Applicant believes that the Examiner’s reliance on Gupta is misplaced. The above cited text indicates that the telephone module TM (16) taught by Gupta is connected between a telephone and the CPE (or Home LAN Hub (HLH) (20)), contrary to the teachings of the present invention, namely a digitizer between the CPE and ATM switch.

Additionally, the Applicant respectfully asserts that the teachings of Gupta, in fact, teach away from sending an analog POTS signal over existing POTS lines in case of an equipment or power failure at the customer site as taught in the present invention. The above cited passages from Gupta teach digitization of all voice signals before being transmitted by the HLH to the ATM network. The Applicant asserts that this

digitization of voice messages in all cases is contrary to the claims of the present invention. The present invention claims systems and methods for preserving standard voice service over POTS in case of an equipment or power failure at the customer site. Specifically, the lifeline taught in the present invention is designed to avoid digitization of voice signals during such a failure so that the voice signal may be routed through a standard POTS line without transmission of a digitized signal over the POTS line. The Applicant refers to Fig. 21 of the present invention. The Examiner may note that a second POTS splitter (2102) and a POTS digitizer (2105) reside at the Central office location to receive an analog POTS voice signal over the standard POTS line.

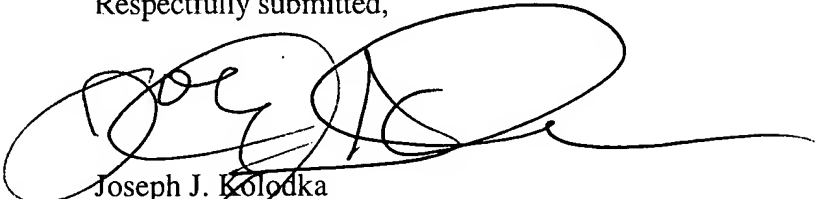
Furthermore, as there is no method discernible from the teachings of Gupta regarding transmission of analog POTS signals, the Applicant respectfully asserts that a practitioner skilled in the art of DSL architecture would have no motivation to combine the teachings of Gupta with those of Kaplan and Gerszberg.

Independent claims 12, 26 and 29 have been amended to include the disclosed statistical multiplexer within the signal digitizer. The Applicant believes that independent claims 21, 26 and 29, as amended, are patentably distinct over the cited references. As claims 23-24, 28 and 30-33 depend from claims 21, 26 and 29, the Applicant believes that these independent claims are patentably distinct over the prior art as well.

In view of the foregoing, Applicant respectfully requests that the rejections of the claims set forth in the Office Action of August 15, 2005 be withdrawn, that pending claims 21, 23-24, 26 and 28-33 be allowed, and that the case proceed to issuance of Letters Patent in due course.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to Applicant's representatives Deposit Account No. 07-0832

Respectfully submitted,



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